ork Order ID 80609 aursday, February 23, 2012 3:03:22 PM

at m	
	Page 1
Note	

Item ID:

D350-636-015

Accept

N900040100

Setup Start

Revision ID: Item Name:

Skidtube STD w/ Training Wearplates, LH

Start Date:

Required Date: 3/14/2012

2/24/2012

Start Qty: 1.00 Req'd Qty: 1.00

Cust Item ID:

Customer:

Tool ID

Reference:

Approvals:

Process Plan:

Date: 2-02-23 Tooling:

Date:

Run

Reject

Oty

OC:

Date:

SPC (Y/N):

Set Up/

Run Hours

Date:

Stop

Reject

Number

Insp.

Stamp -

Sequence ID/ Work Center iD	Operation Description
Draw Nbr	Revision Nbr
D3492	C
D4168	A
IIN-D350-636	1

100

DOCUMENT CONTROL

Memo

Document Control

0.00

Accept

Oty

Photocopy blue file and type labels per PPP D350-636-015 (CHG 002) or cha 3

per ECN 12-512

(N4104-041 (Rw B) or RovC)

Tool # Plan

Code

Dart Ae	rospace	e Ltd	* 1.50 m		·			***	
W/O:			WO	RK ORDER CHANG	GES				through the
DATE	STEP	PRO	OCEDURE CHAN	IGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
* .									
			· .						
Part No		PAR #:	_	ory:		مايده م		Date:	
NCR:			·	R NON-CONFORM					
non.	·				etion B	*			
DATE	STEP	Description of NC Section A	Initial Chief Eng	Action Description Chief Eng	Sign of Date		ition	Approval Chief Eng	Approval QC Inspector
						*			
								,	

Work Order ID 80609

Thursday, February 23, 2012 3:03:22 PM

Item ID:

D350-636-015

Revision ID: Item Name:

Skidtube STD w/ Training Wearplates, LH

Start Date:

2/24/2012

Start Qty: 1.00 Req'd Qty: 1.00

Cust Item ID:

Customer:

Reference:

Process Plan: Approvals:

OC:

Required Date: 3/14/2012

Date:

Date:

Tooling:

0.00

0.00

Accept

Date:

Date:

N900040100

Run

Start

Setup

Stop

Sequence ID/

Work Center ID

Operation Description

Skidtubes

Set Up/ **Run Hours**

SPC (Y/N):

Tool ID

Tool # Plan Code Accept Qty

Reject **Qty**

Reject Number Stamp

Memo

1- Pick D2600-3 Bent

2- Deburr FWD and AFT ends, remove bending marks. Scribe batch# inside AFT end per dwg D4168

3- Drill pilot holes for blade fitting bolt holes using DT8983. Open to 0.500". deburr, section H-H

4- Locate DT8330 off of blade fitting bolt holes and drill pilot holes for blade fitting, section H-H

5- Drill fwd step holes using DT9616. Ensure proper positioning. All holes as per dwg D4168, detail A

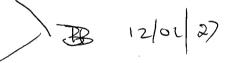
6- Drill pilot holes as per Dwg D4168 sheet 4 (D4168-1 details). Drill using drill Jig DT8150 & DT8863A for first side only DT8863B for second side (detail B)

7- Clecko DT8863B on second side of tube and drill pilot holes for detail B. ***SECOND SIDE***

8- Drill most FWD wearplate hole using DT9678 locating off of 66.54" hole.

9-Open up holes of Detail A to 0.297" (total of 2 holes per side) and .201" (total of 1 hole per side) open holes of detail D section H-H to 0.500" as per dwg D4168

10-Weld D2744 Cap as per Dwg D4168 and OSI 004. Fill grooves in bend left from bending as per OSI 004



W/O:			WO	RK ORDER CHANG	ES				-	
DATE	STEP	PR	OCEDURE CHAI	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approva QC Inspecto	
			,							
ţ.										
Part No	•	PAR #:	Fault Categ	jory:	NCR: Yes	No DQ	A:	Date:		
•			Disposition	Disposition: QA: N/C Closed: Date						
NCR:		,	WORK ORDE	R NON-CONFORMA	NCE (NCR)				
DATE	eten.	Description of NC		Corrective Action Section		Verific	cation	Approval	Approva	
DAIE	STEP Description of NC Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C		Chief Eng	QC Inspecto		
							<u>.</u>			
								_		
		•								
							i			
*							;			

Page 3

Insp.

Stamp

Thursday, February 23, 2012 3:03:22 PM D350-636-015 Item ID: Accept *N900040100* Setup Start **Revision ID:** Stop Skidtube STD w/ Training Wearplates, LH Item Name: **Start Date:** Start Qty: 1.00 2/24/2012 Cust Item ID: **Required Date:** 3/14/2012 **Reg'd Qty:** 1.00 Customer: Reference: Run **Process Plan: Approvals:** Date: **Tooling:** Date: Stop QC: SPC (Y/N): Date: Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Reject Accept Reject Work Center ID > Description Run Hours Qty Code Qty Number BE 12/03/01 A/R Aluminum Rod batch: M 14-03-05 11-Grind welds flush as per Dwg D4168 120 QC10- Inspect visual per QSI004- ground welds Salosko Memo Quality Control

130

QC

QC5- Inspect part completeness to step on W/O

0.00

130

Memo

5,2/9/15

Quality Control

0.00

								**	
W/O:			WO	RK ORDER CHANGE	S				
DATE	STÉP	PRO	OCEDURE CHAI	IGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
		\				·			
								,	
									
						-			
Part No	•	PAR #:	Fault Categ	ory:	NCR: Yes	No DQA	\:	Date:	
	R	esolution:	Disposition	:	QA: N/C CI	osed:		Date: _	· · ·
NCR:			WORK ORDE	R NON-CONFORMAN	ICE (NCF	R)			
DATE	OTED	Description of NC		Corrective Action Section		Verific	ation	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign 8 Date	Section		Chief Eng	QC Inspector
							·		
								: :	
	y								
									·
							•		
								,	
` *	11.								
•	1								

Work Order ID 80609

Thursday, February 23, 2012 3:03:22 PM

Item ID:

D350-636-015

Revision ID:

Item Name:

Skidtube STD w/ Training Wearplates. LH

Start Date:

2/24/2012

Start Qty: 1.00 **Req'd Qty:** 1.00

Accept

N900040100

Setup Start

Stop

Cust Item ID:

Customer:

Reference:

Approvals: **Process Plan:**

Required Date: 3/14/2012

Date: Date: Tooling:

SPC (Y/N):

Set Up/

Run Hours

Date: Date:

Run

Stop

Sequence ID/ Work Center ID

Description

QC:

140

140

HandFinish

Operation

Chemical Conversion Coat per QSI005 4.1

Memo

0.00

Tool ID

Tool # Plan Code

Accept Qty

Reject Qty

Reject Number

Insp. Stamp

Hand Finishing

0.00

DC 12/03/15

150

QC

QC3- Inspect Part Finish

0.00

Memo

0.00

SAO 12-03-15

Quality Control

7

Duit Aci	á pao.								
W/O:			W	ORK ORDER CHANGE	S				
DATE	STEP	PRO	OCEDURE CH	ANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
								• .	
الا ما العام العام العام الما العام	1.					<u> </u>			<u> </u>
Part No:	.	PAR #:	Fault Cat	egory:	NCR: Yes	No DQA	/:	Date: _	
	R	esolution:	Dispositi	on:	QA: N/C Cl	osed:		Date: _	
NCR:			WORK OR	DER NON-CONFORMAN	NCE (NCR)			·
DATE	STEP	Description of NC		Corrective Action Section		Sign & Section C		Approval	Approval
DAIL	SIEF	Section A	Initial Chief Eng	Action Description Chief Eng				Chief Eng	QC Inspector
						:			
		30 179							·
		1 S. C.							
				**					

Work Order ID 80609

Thursday, February 23, 2012 3:03:22 PM

80609

Page 5

D350-636-015 Accept Item ID: *N900040100* Setup Start **Revision ID:** Stop Item Name: Skidtube STD w/ Training Wearplates, LH **Start Date:** 2/24/2012 Start Oty: 1.00 **Cust Item ID:** Required Date: 3/14/2012 Req'd Qty: 1.00 **Customer:** Reference: Run Start Process Plan: Date: Approvals: Tooling: Date: Stop QC: Date: SPC (Y/N): Date: Sequence ID/ Operation Tool ID Set Up/ Tool # Plan Accept Reject Reject Insp. Work Center ID **Description** Run Hours Code Qty Qty Number Stamp 160 0.00 Skidtubes *160* Skidtubes 0.00 Skidtubes 1-Open up holes of Detail C and ground handling section AL-AL to 0.625 (total of 8 holes per side) as per dwg D4168. 2-Open up holes of Detail B to 0.750" (total of 4 holes per side) as per dwg D4168. 3- Open float hole to 0.500" (4 per side) section AJ-AJ Open wearplate holes to size as per dwg (4 holes per sides), section CG-CG 4-Chamfer holes of Detail B, C, ground handling section AL-AL and float holes section AJ-AJ per dwg D4168 (welding instructions on sheet 8) 5-Deburr and blow out all chips from inside of tube 6- Prepare tube for welding, remove alodine as required. 7-Bond web D2739 in place as per QSI 015 A/R Sikaflex-291 batch: 120 8/3 exp. date: <u>2012 ~ 08</u>~ 12 8- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D4168 and D4170-1 & QS1004 (welding instructions on sheet 8)
A/R Aluminum Rod batch: MIZO/64

✓ 9- At section AJ-AJ drill out x-bolt spacer to 0.404

W/O:		· · · · · · · · · · · · · · · · · · ·	W	ORK ORDER CHANG	ES					
DATE	STEP	PRO	CEDURE CH	ANGE	Ву		Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
					į	ļ.		**		
							• :			
Part No:	:	PAR #:	_ Fault Cat	၇ egory:	NCR: Y	es N	lo /DQA	\:	Date:	
	R	esolution:	_ Dispositi	on:	QA: N/C	Clo	sed:		Date:	<u> </u>
NCR:	· · · 	. W	ORK OR	DER NON-CONFORMA	NCE (N	CR)			÷	
DATE	OTED	Description of NC	Corrective Action Section B Verification		ation	Approval	Approval			
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng		gn & ate	Section		Chief Eng	QC Inspector
12.03.22	160	\$ 0.464 HOLES ARE UP TO \$ 0.416. \$0.313 holes are UP	R.S.22	Acceptale					P	
		10 0323 holes are UP	Pron			••			12.03.12 B1042	
							_			
· · · · · · · · · · · · · · · · · · ·										
	1									

80609

Page 6

Thursday, February 23, 2012 3:03:22 PM D350-636-015 Item ID: Accept *N900040100* Setup Start **Revision ID:** Skidtube STD w/ Training Wearplates, LH Item Name: Start Qty: 1.00 **Start Date:** 2/24/2012 **Cust Item ID: Required Date:** 3/14/2012 Req'd Qty: 1.00 **Customer:** Reference: Run Start **Process Plan: Approvals:** Date: **Tooling:** Date: Stop QC: SPC (Y/N): Date: Date: Sequence ID/ **Operation** Tool ID Accept Set Up/ Tool # Reject Plan Reject Insp. **Work Center ID** Description Qty Number Code Qty **Run Hours** Stamp ✓ 10-Grind welds flush as per Dwg D4168 / 11-Spot face ground handling holes section (total of 4 places per side) as per dwg D4168, section AL-AL 12- C'bore section CG-CG 13- Deburr holes FOR DELUXE SKIDTUBE APPLICABLE DRILL TOW RING HOLE IN TUBE ********* 170 QC10- Inspect visual per QSI004- ground welds 0.00 0.00 Memo Quality Control _

4

	•								
W/O:			WC	RK ORDER CHANGI	ES				
DATE	STEP	PRO	OCEDURE CHAI	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
						·			
·									
Part No	•	PAR #:	Fault Cate	Jory:	NCR: Yes	No DQA	A :	Date: _	
	Re	esolution:	Disposition	n:	QA: N/C CK	osed:		Date: _	
NCR:			WORK ORDE	ER NON-CONFORMA	NCE (NCR)			
DATE	STEP	Description of NC		Corrective Action Section		Verific		Approval	Approval
	J	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section	on C	Chief Eng	QC Inspector
								,	
					·				
,									

Powdercoat

Powder Coating

80609

Page 7

Thursday, February 23, 2012 3:03:22 PM Item ID: D350-636-015 Accept *N900040100* Setup Start **Revision ID:** Item Name: Skidtube STD w/ Training Wearplates, LH Start Date: 2/24/2012 Start Qty: 1.00 **Cust Item ID:** Required Date: 3/14/2012 Req'd Qty: 1.00 **Customer:** Reference: Run Approvals: Process Plan: Date: **Tooling:** Date: Stop QC: Date: SPC (Y/N): Date: Sequence ID/ Operation Tool # Plan Set Up/ Tool ID Accept Reject Reject Insp. Work Center ID Description **Run Hours** Qty Code **Q**ty Number Stamp 180 QC5- Inspect part completeness to step on W/O 0.00 *120* QC 0.00 Memo Quality Control 190 Pressure Wash per QSI005 4.3 0.00 *190* HandFinish 0.00 Memo Hand Finishing Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch. 200 White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum 0.00 *200*

0.00

M120222

M//O:			\MC	RK ORDER CHANG	EC			
Part No:	STEP	PRO	OCEDURE CHAI	·····	By	Date Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
	:							
	rt No: PAR #:							
Part No		PAR #:	Fault Cate	Jory:	NCR: Yes	No DQA:	Date: _	
	R	esolution:	Disposition	າ:	_ QA: N/C Clo	sed:	Date: _	
NCR:		\	WORK ORDE	R NON-CONFORMA	NCE (NCR			
DATE	CTED	Description of NC		Corrective Action Section		Verification	Approval	Approval
DALE	SIEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspector
•								
						:		
								*
•								

Work Order ID 80609

Hand Finishing

Thursday, February 23, 2012 3:03:22 PM

80609

D350-636-015 Item ID: Accept *N900040100* Setup Start **Revision ID:** Item Name: Skidtube STD w/ Training Wearplates, LH *1* **Start Date:** 2/24/2012 Start Qty: 1.00 **Cust Item ID: Required Date:** 3/14/2012 Req'd Qty: 1.00 *1* **Customer:** Reference: Run Start Approvals: **Process Plan: Tooling:** Date: Date: Stop QC: Date: SPC (Y/N): Date: Sequence ID/ Operation Tool # Plan Reject Set Up/ Tool ID Accept Reject Insp. Work Center ID Description Qty Qty Number **Run Hours** Code Stamp 210 QC3- Inspect Part Finish 0.00 *210* ΟĊ 0.00 Memo Quality Control Inspect for foreign object per QSI 024 1 htc The 4 Menloulu 220 0.00 HandFinishing *220* HandFinish 0.00 Memo

1- Install inserts as per Dwg D4168

-411710	. oopaoi	Liu							
W/O:			WC	ORK ORDER CHANGE	ES				
DATE	STEP	PRO	ROCEDURE CHANGE			Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
		·							
				. •					
Part No	•	PAR #:	Fault Cate	gory:	NCR: Yes	No DQ	A:	Date:	
	R	esolution:	Disposition	າ:	QA: N/C Cld	sed:		Date: _	
NCR:			WORK ORDI	ER NON-CONFORMA	NCE (NCR)		-	
DATE	STEP	Description of NC		Corrective Action Section		gn& Section C C		Approval	Approval
	O I E	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date			Section C	
							4		

80609

Page 9

Thursday, Febru	uary 23, 2012	2 3:03:22 PM		α	11.19						rage 9
Item ID: Revision ID: Item Name:	D350-636-0 Skidtube STI	015 O w/ Training Wearplate	es, LH	Accept	*N900	040	110) * ፡	Setup Star Stop	IVI	S1*
Start Date: Required Date: Reference:	2/24/2012 3/14/2012	Start Qty: 1.00 Req'd Qty: 1.00	*1 [;] *1 [;]		Cust Item Customer:	ID:				IV	,
Approvals:	Process Pla	an:	Date:	Tooling: SPC (Y/N):		ate:		. F	Run Star Stop	I/I	R1* R2*
Sequence ID/ Work Center II 230 **730* HandFinish Hand Finishing		2-Spray ins 3-Install bla per dwg D4 SIKA FLE) BATCH: // EXP DATE 4-assemble A/R 55-o'ri	168 (241 /\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	wearshoes and ground handling wearshoes and ground handling we go and apply o'ring lub	е	Tool#	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp M 1160
240 * ?40 * QC Quality Control		QC5- Inspect part complete Memo	leteness to step on W/G	0.00 Signal	12		(e O			

	•									
W/O:			V	ORK ORDER CHANG	GES					
DATE	STEP	PRO	OCEDURE CH	IANGE	8	у	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
		*·								
			·							
Part No		PAR #:	Fault Ca	tegory:	NCR: `	Yes N	o DQ	A:	Date:	
	Re	esolution:	Disposit	ion:	QA: N/	C Clo	sed:		Date: _	· .
NCR:		•	WORK OR	DER NON-CONFORM	ANCE (i	ICR)				
DATE	STEP	Description of NC			tion B			ation	Approval	Approval
	U.L.	Section A	Initial Chief Eng	Action Description Chief Eng		ign & Date	Secti	on C	Chief Eng	QC Inspector
				•						
										:
					•					
,										

Packaging

Insp.

Stamp

Thursday, February 23, 2012 3:03:22 PM Item ID: D350-636-015 Accept *N900040100* Setup Start **Revision ID:** Stop Item Name: Skidtube STD w/ Training Wearplates, LH *1* Start Date: 2/24/2012 Start Qty: 1.00 **Cust Item ID: Required Date:** 3/14/2012 Req'd Qty: 1.00 *1* **Customer:** Reference: Run Approvals: **Process Plan:** Date: **Tooling:** Date: Stop QC: Date: SPC (Y/N): Date: Sequence ID/ Operation Tool ID Tool # Plan Set Up/ Accept Reject Reject **Work Center ID** Description Qty **Run Hours** Qty Code Number 250 Pick Kit 0.00 *250* (42/4/17 (VS) Packaging 0.00 Packaging If making a D350-636-215 pick kit will only requires: 1 X AN3C37A LX AN3C34A 1 X AN3C42A 2 X D3493-1 260 QC4- 100% Inspect kits for completeness Sirlal17 Memo Quality Control *****ensure antiseize is on AN8C21A bolts****** 270 0.00 Packaging *970* Packaging 0.00Memo

Identify and pack for shipping as per PPPD350-636-01-

W/O:		·····	WORK ORDER CHANGES									
DATE	STEP	PR	OCEDURE CHA	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector			
								•				
Dort No.	_		Foult Oaks		NOD: Var	N- 50	<u> </u>	Deter				
Part No		PAR #:										
	Hes	solution:						Date: _				
NCR:			WORK ORDE	ER NON-CONFORMA	NCE (NCR)						
DATE	STEP Description of NC				Section B Veri			Approval	Approval			
DATE	SIEF	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Secti	on C	Chief Eng	QC Inspector			
•												
						:			·			
												
					'							
~												

Thursday, February 23, 2012 3:03:22 PM

Item ID:

D350-636-015

Revision ID:

Item Name:

Skidtube STD w/ Training Wearplates, LH

Start Date:

2/24/2012

Start Qty: 1.00

Required Date: 3/14/2012

Req'd Qty: 1.00

Reference:

Approvals:

Process Plan:

Date:

QC:

Date:

Tooling:

SPC (Y/N):

Set Up/

Run Hours

Accept

Cust Item ID:

Customer:

Date:

N900040100

Date:

Run Start

Setup Start

Stop

Sequence ID/ Work Center ID Operation Description

QC21- Final Inspection - Work Order Release

280

QC

280

Memo

Quality Control

Tool ID

Tool # Plan Code

Accept Qty

Reject Qty

Reject Number

Insp. Stamp

	•							
W/O:			W	ORK ORDER CHANG	ES			
DATE	STEP	PRO	OCEDURE CHA	NGE	Ву	Date Qt	Approval Chief Eng / Prod Mgr	Approval QC Inspector
						Ė		
		*						
Dart No.	•	DAD #.	Foult Cate		NCD: Voc. N	lo DOA	Deter	<u> </u>
rail NO		PAR #: esolution:						
				ER NON-CONFORMA			Date	
NCR:					-	<u> </u>	- 1	T
DATE	STEP	STEP Description of NC Section A		Corrective Action Section Action Description	on B Sign &	Verification Section C	Approval Chief Eng	Approval QC Inspector
		Section A	Initial Chief Eng	Chief Eng	Date	Section 0	Office Ling	QO mapootor

Picklist Print

Thursday, February 23, 2012 3:03:21 PM

Work Order ID:

80609

Parent Item:

Comments:

AN3C36A

BOLT

D350-636-015

Parent Item Name:

Skidtube STD w/ Training Wearplates, LH

IPP rev:A 10.09.28 new issue DD verf:EC

Purchased

No

Start Date: 2/24/2012

Required Date: 3/14/2012

Page 1

Status

Start Qty: 1.00

Required Qty: 1.00

Comments:	IPP rev:A 10.09.2 DD verf:EC			.10.18 as per	IPP Rev: NCR 11-906 D		ecn11-553					
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued
SAN3C34A		Purchased	No			230	Each	52.0000	1	1 ′	,	//

Location

ST353 52 32 116075 20 117514 Purchased No 230 Each 161.0000

Location	Loc Qty	Loc Code
FG	4	
101261	4	
ST353	157	
116590	0	
119083	2	
119324	92	
119530	1	
120446	22	
120641	40	

Loc Qty

Loc Code

)		230	Each	224.0000
	Location	Loc Qty		Loc Code
	ST354	224		
	116874	11		
	117010	2		
	118709	50		
	119324	25		
	110401			

120422

120731

1 MIZIO13 (x4) SU MONIK

119531 11 120308 25

50

50

116075

W/O:			V	ORK ORDER CHANG	ES				
DATE	STEP	PRO	OCEDURE CH	IANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
						,			
Part No	•	PAR #:	Fault Ca	tegory:	NCR: Yes	No DQ	A:	Date: _	
	R	esolution:	Disposit	ion:	QA: N/C C	osed:		Date: _	
NCR:			WORK OR	DER NON-CONFORMA	NCE (NCF	₹)			
DATE	STEP Description of NC			Corrective Action Section		Verific		Approval	Approval
	O I-LI	Section A	Initial Chief Eng	Action Description Chief Eng	Sign 8 Date	Section	on C	Chief Eng	QC Inspector
									·
•									

Thursday, February 23, 2012 3:03:21 PM

Work Order ID:

80609

Parent Item:

AN3C42A

D350-636-015

Parent Item Name:

Skidtube STD w/ Training Wearplates, LH

Purchased No

230

Each

53.0000

1

Start Date: 2/24/2012

Start Qty: 1.00

Required Qty: 1.00

Required Date: 3/14/2012

a Qiy. 1.00

111.001211	Furchaseu		250	33.0000	
BOLT					CC P
		<u>Location</u>	Loc Qty	Loc Code	٩
		ST354	53		
		106176	1		
		118131	2		1101-0
		119673	25		1/96 73
		120464	25		
D3492-1	Manufactured	٧o	230 Each	138.0000	8 8
Plug					12/04/ca
		Location	Loc Qty	Loc Code	
		FP002	138		
		69531	8		
		74444	2		
		76235	28		
		77037	100		$\vee \circ$
D3492-3	Manufactured N	lo —	230 Each	77.0000	8 2 8
Plug					8B81967 (x8) 1210417
,		Location	Loc Qty	Loc Code	
		FP002	1		
		77039	1		
		FP-A	76		
		78600	76		
D3873-1	Manufactured N	lo	230 Each	241.0000	7
Bushing	Manufactureu		250 Each	241.0000	1879561 (x7) Mu nouliz
2.00.00		1 4	* 0		
		Location	Loc Qty	Loc Code	
		ST067	241		
		64760	1		
		68247	4		
		73829	19		
		73830	2		

215

79560

W/O:	,		W	ORK ORDER CHANG	ES			•	
DATE	STEP	PRO	CEDURE CH	ANGE	Ву	Da	te Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	:	PAR #:	Fault Cate	egory:	NCR: Yes	s No	DQA:	Date: _	
	Re	esolution:	Disposition	on:	_ QA: N/C	Closed	l:	Date: _	· · · · · · · · · · · · · · · · · · ·
NCR:		V	VORK ORD	ER NON-CONFORMA	NCE (NC	R)		,	
DATE	STEP	Description of NC	Corrective Action Section	on B Sign	v V	erification	Approval	Approval	
		Section A	Initial Chief Eng	Action Description Chief Eng	Dat		Section C	Chief Eng	QC Inspector
•									
									
•									;
					1				1

Thursday, February 23, 2012 3:03:21 PM

Work Order ID:

80609

Parent Item:

D350-636-015

Parent Item Name:

Skidtube STD w/ Training Wearplates, LH

D4154-041 Wearplate Assembly

Thursday, February 23, 2012 3:03:21 PM

Manufactured

230 Each

3

3

21

5

16

Loc Qty

Loc Qty

3.0000

Loc Code

Loc Code

Loc Code

Loc Code

B80729

Start Date: 2/24/2012

Start Qty: 1.00

Required Date: 3/14/2012

Required Qty: 1.00

all Hel isloulis

D4170-1 No Manufactured

Bushing

D4171-1

Bushing

Location

LG001

Location

FP001

230

Each

21.0000

No Manufactured

76677

71844

77007

230

Each

11.0000

Location ST135

FG

GA

ST300

ST301

77008

103691

120693

119901

118077

118614

11 11

Loc Qty

Each

121041

Nut

MS21043-3

Purchased

No

230 Location

Loc Qty

72

72

400

400

308

308

493

441

2

1,273.0000

118686

30 20

	p							
W/O:			W	ORK ORDER CHANGI	ES			
DATE	STEP	PRO	OCEDURE CHA	NGE	Ву	Date Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
							,	
	<u> </u>							
							**	
								<u> </u>
Part No	•	PAR #:	Fault Cate	gory:	NCR: Yes 1	lo DQA:	Date: _	
	R	esolution:					Date: _	·
NCR:			WORK ORD	ER NON-CONFORMA	NCE (NCR)			
DATE	STEP	Description of NC	Corrective Action Section		Verification	Approval	Approval	
	UILI	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspector
•								

Thursday, February 23, 2012 3:03:21 PM

Work Order ID:

80609

Parent Item:

D350-636-015

Parent Item Name:

Skidtube STD w/ Training Wearplates, LH

NAS1149C0363R

Washer

Purchased

No

230

Each

3.520.0000

Start Qty: 1.00

Start Date: 2/24/2012

Required Qty: 1.00

Required Date: 3/14/2012

NAS1149D0863J WASHER

NAS1515H3L

WASHER

Purchased

Purchased

No

No

114742

3520 250 Each

3520

Loc Qty

231.0000

Loc Code

Loc Code

Location ST298

Location

ST297

118078 119307 120308

120360

36 95 100 230 Each

100

231

Loc Qty

220.0000

VJ

Location Loc Qty Loc Code FG 40 102472 40 ST277 180 118686 3 119438 1 120072 76

Thursday, February 23, 2012 3:03:21 PM

	•												
W/O:			WORK ORDER CHANGES										
DATE	STEP	PRO	OCEDURE CH	ANGE	Ву	1	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector			
							,						
						-							
Part No	•	PAR #:	Fault Cat	egory:	_ NCR: Ye	es No	DQ/	A:	Date:				
	Re	esolution:	Dispositi	on:	QA: N/C	Clos	ed:		Date: _	<u></u>			
NCR:		\	WORK ORE	DER NON-CONFORM	ANCE (N	CR)							
DATE	STEP	Description of NC Corrective Action						rification Approv		Approval			
DATE	SIEP	Section A	Initial Chief Eng	Action Description Chief Eng		n & ate	Section		Chief Eng	QC Inspector			
								•					
						:							
								,					
•													

Thursday, February 23, 2012 3:03:21 PM

Work Order ID:

80609

Parent Item:

D350-636-015

Parent Item Name:

Skidtube STD w/ Training Wearplates, LH

Start Date: 2/24/2012

Required Date: 3/14/2012

Start Qty: 1.00

Required Qty: 1.00

NAS1611-010 O-RING	Purchased	No		230	Each	167.0000	8 M 811641/12
			<u>Location</u>	Loc Qty		Loc Code	
			FP	50			
			110915	0			
			120770	50			
			FP001	117			X &
			110915	. 14			
			117460	8			
			118077	. 1			
			118612	3			
			119438	47			
			120308	44			
NAS1611-013 O-RING	Purchased	No		230	Each	126.0000	8 . Al. 121 6 (x 8) Il 12 (out)
			Location	Loc Qty		Loc Code	
			FP001	126			
			116582	5			
			117291	2		1	
			117887	53			
			119623	36			
			120360	30			
D2744 Cap	Manufactured	No		110	Each	62.0000	1 DE 12/03/01
			Location	Loc Oty		Loc Code	, ,
			LG002	62			
			62715	1			· · · · · · · · · · · · · · · · · · ·
			70881	12			
			71861	7			<u>r</u>

42

78900

Dart /	Aeros i	pace	Ltd
--------	----------------	------	-----

Duit No	oopase	LIM							
W/O:		***************************************	W	ORK ORDER CHANGES					
DATE	STEP	PRO	OCEDURE CHA	ANGE	By Da			Approval Chief Eng / Prod Mgr	Approval QC Inspector
_									
Part No	•	PAR #:	Fault Cate	egory: N	CR: Yes	No DQ	A:	Date:	
Resolution:			Disposition	Disposition: QA			A: N/C Closed:		
NCR:		-	WORK ORD	ER NON-CONFORMANC	E (NCF	₹)			
DATE	STEP	Description of NC		Corrective Action Section B		Verific	cation	Approval	Approval
DAIL		Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date		on C	Chief Eng	QC Inspector
	,								
								. .	
•									

Thursday, February 23, 2012 3:03:21 PM

Work Order ID:

80609

Parent Item:

D350-636-015

Parent Item Name:

Skidtube STD w/ Training Wearplates, LH

D2600-3-BENT Extrusion Bent

D2743

D2739

350 I Beam

D3490-3

Crossbolt Spacer

Manufactured

110

Each

17.0000

Loc Code

Start Qty: 1.00

Start Date: 2/24/2012

Required Date: 3/14/2012

Required Qty: 1.00

Location Loc Qtv LG 66875 73253 75021 75022 75023 77623 79497

No Manufactured

160

Loc Qty

164

64

17

Each 164.0000

Loc Code

BE 12/03/16

LG001 67766 68251 73403 74445 78603 No Manufactured

Location

92 160

Each

12-03-15

Location LG

No

Manufactured

72155

Loc Qty Loc Code

Each 46.0000

1.0000

Cross Bolt Spacer

Location LG001

77567 78800 Loc Oty 46 6

40

160

Loc Code

Dart	Aeros	pace	Ltd
------	--------------	------	-----

	•									
W/O:			WC	RK ORDER CHANG	ES		···· · · · · · · · · · · · · · · · · ·			
DATE	STEP	PRO	PROCEDURE CHANGE			Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC inspector	
Part No	:	PAR #:	Fault Cate	gory:	_ NCR: Yes	No DQ	A:	Date: _		
Resolution:			Dispositio	Disposition: QA			QA: N/C Closed: Date:			
NCR:			WORK ORDI	ER NON-CONFORMA	ANCE (NCF	R)				
DATE	CTED	Description of NC	scription of NC Corrective Action		ion B	Verific	cation	Approval	Approval	
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Sect	ion C	Chief Eng	QC Inspector	
								٤	•	
						:				

Thursday, February 23, 2012 3:03:21 PM

Work Order ID:

80609

Parent Item:

ALS4-1032-225

Insert

AN8C35A

BOLT

D350-636-015

Parent Item Name:

Skidtube STD w/ Training Wearplates, LH

Purchased

Purchased

D3490-1 Cross Bolt Spacer

Manufactured

No

No

57.0000

Start Date: 2/24/2012

Start Qty: 1.00

Required Date: 3/14/2012

Required Qty: 1.00

Location	Loc Qty	Loc Code	
LG001	57		
62450	2		
74875	4		
77042	8		
78793	43		<u> </u>
	230 E	ach 1,286.0000	4 M 4 isloulis
Location	Loc Qty	Loc Code	

Each

Location	Loc Qty		Loc Code		
ST281	1031				
108696	146				
110768	62				
118386	55				
118966	68				
120671	700				X-l
ST282	255				
120410	150				
120451	105				
	230	Each	66.0000	1	1

160

Loc Qty	Loc Code	
65		
1		
10		
54		
1		
0		
0		
1		
	65 1 10 54 1	65 1 10 54 1 0

My Moulie

Dail Ac	ospace	Liu							
W/O:			WC	ORK ORDER CHANG	ES				
DATE STEP		PR	OCEDURE CHA	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
						·			
Part No:		PAR #:	Fault Cate	_ NCR: Yes	No DQ	A:	Date:		
Resolution:		Disposition: Q		_ QA: N/C C	QA: N/C Closed:			Date:	
NCR:		,	WORK ORD	ER NON-CONFORMA	NCE (NCF	₹)			
DATE	STEP	Description of NC	Corrective Action Section B			Verific	ation	Approval	Approval
DAIL	Section A		Initial Chief Eng				Section C Chief Eng		QC Inspector
									·
•									

Thursday, February 23, 2012 3:03:21 PM

Work Order ID:

80609

Parent Item:

D350-636-015

Parent Item Name:

Skidtube STD w/ Training Wearplates, LH

D3488-041

Manufactured

230

Loc Qty

17

7

9

Each

17.0000

Loc Code

Start Date: 2/24/2012

Start Qty: 1.00

Blade Fitting Assembly, LH

AN6C44A **BOLT**

MS21083C8

NUT

Purchased

Purchased

No

No

ST304

77021

61689 75056

Location

FP002

230

Each

98.0000

Modlin

Required Date: 3/14/2012

Required Qty: 1.00

Location Loc Qty Loc Code FG 2 103964 2 ST343 96 120095 16 120143 25 27 120465 28 12064.1 230 Each 67.0000

51

26

25

M mours

Location Loc Qty Loc Code FP002 115884 ST303 15 115884 0 118077 119309 2 119436 10 119638 2

W/O:	T		WC	RK ORDER CHANGI	ES				
DATE	STEP	PRO	OCEDURE CHA	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
									
Part No	•	PAR #:	Fault Cate	gory:	NCR: Yes	No DQ	A:	Date: _	
	Resolution:								
NCR:		,	WORK ORDE	R NON-CONFORMA	NCE (NCF	R)			
DATE	OTED	Description of NC Corrective Action			on B	Verific	ation	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date		on C	Chief Eng	QC Inspector

Thursday, February 23, 2012 3:03:21 PM

Work Order ID:

80609

Parent Item:

D350-636-015

Parent Item Name:

Skidtube STD w/ Training Wearplates, LH

D3631-1 Washer

Manufactured

No

ST297

114915

230

305 305

Each

223.0000

Start Date: 2/24/2012

Start Qty: 1.00

Required Date: 3/14/2012

Required Qty: 1.00

Location Loc Qty Loc Code ST072 223 2 68062 75548 221 MAS1149C0332R Purchased AN960C10L No 230 Each 0.0000 washer D2745 Manufactured No 230 Each 48.0000 Bushing Location Loc Qty Loc Code FP001 48 69529 76142 78597 46 NAS1149C0832R Purchased No 230 Each 305.0000 WASHER Location Loc Qty Loc Code

W/O:		· · · · · · · · · · · · · · · · · · ·	WO	RK ORDER CHANGI	ES				
DATE	STEP	PRO	OCEDURE CHANGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
									·
						····			
Part No	<u> </u>	PAR #:	Fault Categ	jory:	NCR: Yes	No DQA	\:	Date:	
	Re	esolution:	Disposition	:	QA: N/C Cld	sed:		Date: _	
NCR:		WORK ORDE	R NON-CONFORMA	NCE (NCR)				
DATE	STEP	Description of NC		verifica			Approval	Approval	
DAIL	U.L.	Section A	Initial Chief Eng	Action Description Chief Eng	tion Sign & Date		on C	Chief Eng	QC Inspector
									,
							_		,
		·							
•									

Required Date: 3/14/2012

Required Qty: 1.00

Thursday, February 23, 2012 3:03:21 PM

Work Order ID:

80609

Parent Item:

AN3C6A

BOLT

D350-636-015

Parent Item Name:

Skidtube STD w/ Training Wearplates, LH

Purchased No

No

No

Purchased

Manufactured

Start Qty: 1.00

Each

230

692.0000

) 4

Start Date: 2/24/2012

Il hoylin

Location Loc Qty Loc Code FP001 111982 ST351 691 111982 2 116419 23 2 116549 116704 12 117619 10 117688 117872 5 118422 13 119449 21 120423 202 400 120693 230 Each 817.0000

<u>L</u>	<u>ocation</u>	Loc Qty	<u>I</u>	oc Code		
F	G	20				
	103693	20				
S	T301	797				
	112314	87			X	دا
	117887	10				
	118384	200				
	120308	500				
)		250	Each	26.0000	2	2

D3493-1 Washer

MS21043-6

NUT

 Location
 Loc Qty
 Loc Code

 ST050
 26

 70697
 2

 77573
 24

W/O:			W	ORK ORDER CHANGI	ES				
DATE	STEP	PRO	OCEDURE CHA	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
						- "			
Part No		PAR #:	Fault Cate	gory:	NCR: Yes	No DQ	A:	Date:	
		esolution:						4.	
NCR:		\	WORK ORD	ER NON-CONFORMA	NCE (NCF	₹)			
DATE	CTED	Description of NC			on B	Verific	ation	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	k Secti		Chief Eng	QC Inspector
							·		
									·
							•		
		·							
•									

Thursday, February 23, 2012 3:03:21 PM

Work Order ID:

80609

Parent Item:

D350-636-015

Parent Item Name:

Skidtube STD w/ Training Wearplates, LH

MS21083C8 NUT

Purchased

Start Date: 2/24/2012

Required Date: 3/14/2012

Start Qty: 1.00

Required Qty: 1.00

12104/12

67.0000

Each

			Location	Loc Qtv	Loc Code	
			FP002	1		
			115884	1		
			ST303	15		
			115884	0		
			118077	1		
			119309	2		
			119436	10		
			119638	2		
			ST304	51		
			120142	26		× 7
			120731	25		
AN8C21A BOLT	Purchased	No		250 Each	47.0000	2 M 2 12 10 4 1 12
			Location	Loc Qty	Loc Code	The state of the s
			ST343	47		
			118758	5		X
			120094	42		
D2741 Blade, 350 Skidtube	Manufactured	No		250 Each	38.0000	1 M1 12/04/12
			Location	Loc Qty	Loc Code	
			ST	-10		
			ST466	48		
			71856	1		
			76984	37		<u> </u>

W/O:			WC	ORK ORDER CHANG	ES				· · · · · · · · · · · · · · · · · · ·
DATE	STEP	PRO	OCEDURE CHA	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
				· · · · · · · · · · · · · · · · · · ·	,	· · · · · · · · · · · · · · · · · · ·	ļ		
Part No	•	PAR #:	Fault Cata	· .	NCP: You	No DO	Λ.	Data	
Part NO		esolution:							
NCR:			WORK ORDI	ER NON-CONFORMA	NCE (NC	R)		<u> </u>	
DATE	CTED	Description of NC Corrective Action			on B	Verific	cation	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign Date	& Secti		Chief Eng	QC Inspector
,									
					-				
					-		•		
···									
	1		1			1			1

			U		· · · · · · · · · · · · · · · · · · ·	, •
	QTY -041	QTY -042	QTY -043	QTY -044	PART NUMBER	DESCRIPTION
	Х				D4168-041	350 SKIDTUBE ASSEMBLY, LH
		Х			D4168-042	350 SKIDTUBE ASSEMBLY, RH
		T-	Х		D4168-043	350 SKIDTUBE ASSEMBLY, LH
			j	Х	D4168-044	350 SKIDTUBE ASSEMBLY, RH
D	1	1 -	1	1	D2739	WEB
	8	8	8	8	D2743	SPACER
	11	1	1	1	D2744	CAP
	8	8	8	8	D2745	BUSHING
	1		1		D3488-041	BLADE FITTING, LH
		1		1	D3488-042	BLADE FITTING, RH
	4	4	4	4	D3490-1	SPACER
	4	4			D3490-3	SPACER
			4	4	D3490-5	SPACER
	8	8	8	8	D3492-041	PLUG ASSEMBLY
	- 8	8			D3492-043	PLUG ASSEMBLY
			8	8	D3492-045	PLUG ASSEMBLY
I	8	8	8	8	D3631-1	WASHER
- 1	7	7	7	7	D3873-1	BUSHING
l	1	1	_ 1	1	D4154-041	WEARPLATE ASSEMBLY
I	1				D4168-1	SKIDTUBE WELDMENT, LH
: l		1			D4168-2	SKIDTUBE WELDMENT, RH
J			1		D4168-3	SKIDTUBE WELDMENT, LH
ı					D4168-4	SKIDTUBE WELDMENT, RH
Į	4	4	4		D4170-1	SPACER
- [1	1	_ 1	11	D4171-1	BUSHING
L						
ı	4	4	_ 4		ALS4-1032-225	INSERT
L	4	4	4		AN3C6A	BOLT
4	1	1	1		AN3C34A	BOLT
1	4	4	4		AN3C36A	BOLT
L	4	4	4		AN6C44A	BOLT
L	1	1	1		AN8C35A	BOLT
L	9	9	9		AN960C10	WASHER (OR NAS1149CO363R)
L	-4	4	4		AN960C10L	WASHER (OR NAS1149CO332R)
L	1	1	1		AN960C816L	WASHER (OR NAS1149CO832R)
L	5	5	5		MS21043-3	NUT
Ļ	4	4	4		MS21043-6	NUT
L	1	1	1		MS21083C8	NUT
1	4	4	4	4	NAS1515H3L	WASHER

GENERAL NOTES:

MATERIAL: MAKE D4168-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).

FINISH:

9)

MATERIAL: MARKE D4188-17-21-31-4 PROM D2500-3 EXTRUSION (INITIAL LENGTH = 120.0).

MATERIAL: MARKE D4188-17-21-31-4 PROM D2500-3 EXTRUSION (INITIAL LENGTH = 120.0).

FINISH:

CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3

BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).

TOLERANCES: PER DART QSI 018 10 INLESS OTHERWISE NOTED

UNITS: INCHES UNLESS OTHERWISE NOTED

BREAK SHARP EDGES: N/A

IDENTIFICATION: N/A

WEIGHT: D4168-041/-042/-043/-044 = 32.3 LBS

WELD PER DART QSI 004

FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:

MINIMUM YIELD TENSILE STRENGTH = 35 KSI

MINIMUM YIELD TENSILE STRENGTH = 38 KSI

COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.

SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL

SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL

2010 -09- 15

A	NEW IS	SUE		SC	10.08.09				
REV.			DESCRIPTION	BY	DATE				
DESIGN	1	SC	DART AEROSPACE	USA	. INC.				
DRAWN	DRAWN SC		PORT HADLOCK, WA						
CHECK	ED	0	DRAWING NO.	REV. A					
MFG. A	MFG. APPR.		D4168		SHEET 1 OF 11				
APPRO	VED	WA	TITLE S						
DE APPR.		#-	350 SKIDTUBE ASSEMBLY NT						
DATE 10.08.09			COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS TRIVITE AND CONFIDENTIAL AND IS SUPPLIED ON THE DIFFESS CONCINTION THAT IS IN NOT TO BE USED FOR ANY PLAPOSE OR OFFED OR COMMISCRATED TO ANY OTHER PERSON WITHOUT WINSTER PROJECTION FROM DARF APPROACE HIS MED.						

		<i></i>							
W/O:			W	ORK ORDER CHANGE	S		•	,	
DATE	STEP	PRO	OCEDURE CH	ANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
								,	
			 						
Part No	:	PAR #:	Fault Cat	egory:	NCR: Yes	No DQA	4 :	_ Date: _	· · · · · · · · · · · · · · · · · · ·
	R	esolution:	Dispositi	on:	QA: N/C Cld	sed:		Date: _	
NCR:		,	WORK ORE	DER NON-CONFORMAN	ICE (NCR)			
DATE	STEP	Description of NC		В	Verific	ation	Approval	Approval	
DATE	SIEF	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section	on C	Chief Eng	QC Inspector
					·				
•									

DART AEROSPACE USA, INC. DESIGN DRAWN DRAWING NO. CHECKED REV. A MFG. APPR. SHEET 2 OF 11 TITLE APPROVED DE APPR.

350 SKIDTUBE ASSEMBLY

COPYRIGHT © 2010 BY DARY AEROSPACE USA, INC.

PRODUCED OF PRIVATE AND OWNERS OCCUPANT OF THE DOCUMENT O DATE 10.08.09

D4168-042 350 SKIDTUBE ASSEMBLY, RH

D

С

D4168-041 350 SKIDTUBE ASSEMBLY, LH

N/O:		**************************************	WC	RK ORDER CHANGE	S		-		
DATE	STEP	PRO	CEDURE CHA	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
							-		
· · · · · · · · · · · · · · · · · · ·									
		<u> </u>							
Part No	•	PAR #:	Fault Cate	gory:	NCR: Yes	lo DQA:			
	Re	esolution:	Disposition	າ:	QA: N/C Clo	sed:		Date: _	
NCR:		,	WORK ORD	ER NON-CONFORMAL	NCE (NCR)				
DATE	STEP	Description of NC		Corrective Action Section		Verifica	tion	Approval	Approval
DAIL	SIEF	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section	ı C	Chief Eng	QC Inspector
							-		
				•					
							-		
•									

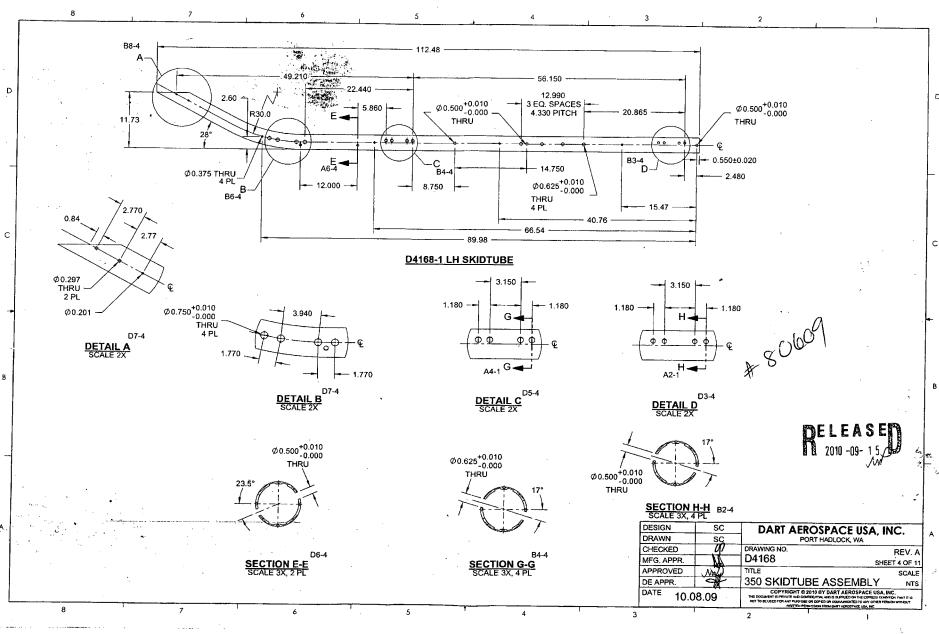
D4168-043 350 SKIDTUBE ASSEMBLY, LH

D4168-044 350 SKIDTUBE ASSEMBLY, RH

DESIGN	SC.	DART AEROSPACE USA. II	VC.
DRAWN	SC	PORT HADLOCK, WA	10.
CHECKED	P	DRAWING NO.	REV. A
MFG. APPR.	_ X	D4168 SHEI	ET 3 OF 11
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	NTS
DATE 10.0	08.09	COPYRIGHT © 2010 BY DART AEROSPACE USA, III THIS BOOLMENT IS PRIVATE AND CONFEDENTIAL AND IS EUPPLED ON THE EXPRESS CONSI HOT TO BE USED FOR ANY PLIPPOSE OR COPPED OR COMMARCIATED TO MAY OTHER PRIVA	TION THAT IT IS

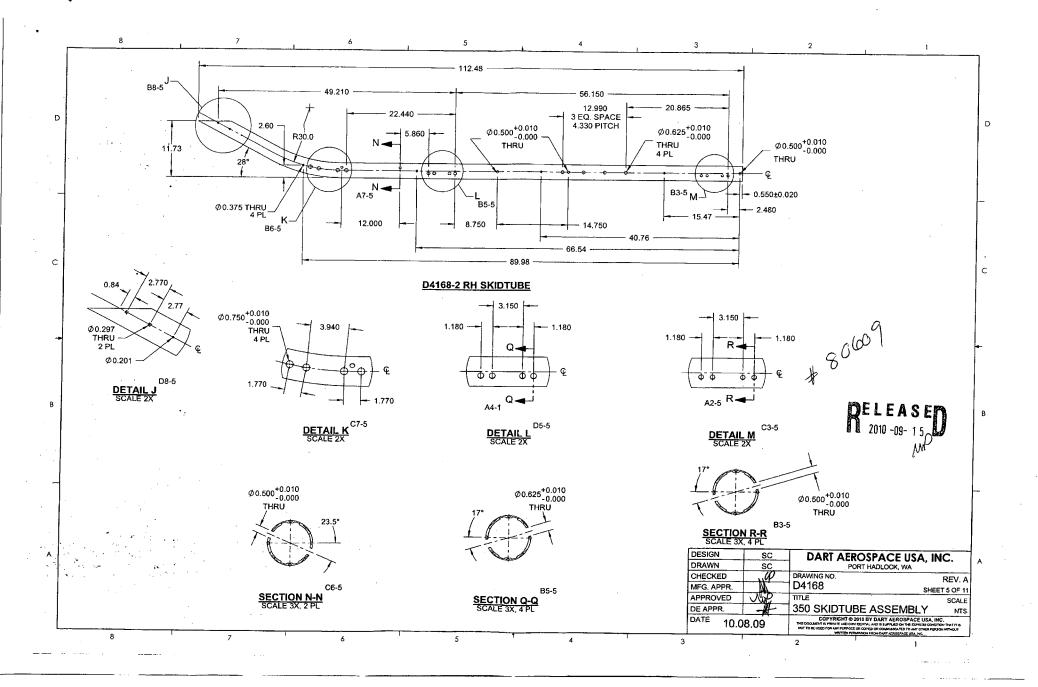
D

	-opas		٠,٠							
N/O:			W	ORK ORDER CHA	ANGES					
DATE	STEP	PROC	EDURE CH	ANGE	A Company	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
				, "						
		•			,					
Part No	٨.	PAR #:	Fault Cate	egory:	NCI	R: Yes	No DQA	<u> </u>	Date:	
	Re	esolution:	Disposition	on:	QA:	N/C CI	osed:	-	Date:	
NCR:				ER NON-CONFO						· ,
DATE	STEP	Description of NC		Corrective Action	Section B		Verifica	ition	Approval	Approval
DAIL	JILF	Section A	Initial Chief Eng	Action Descript Chief Eng	tion	Sign 8 Date	Section	n C	Chief Eng	QC Inspector
- s		S. C.	St. Ada	San						
		X								ė,
	Ž.		· / •			:		·		
		Ţ,					Ĭ,	•		
		•								



-

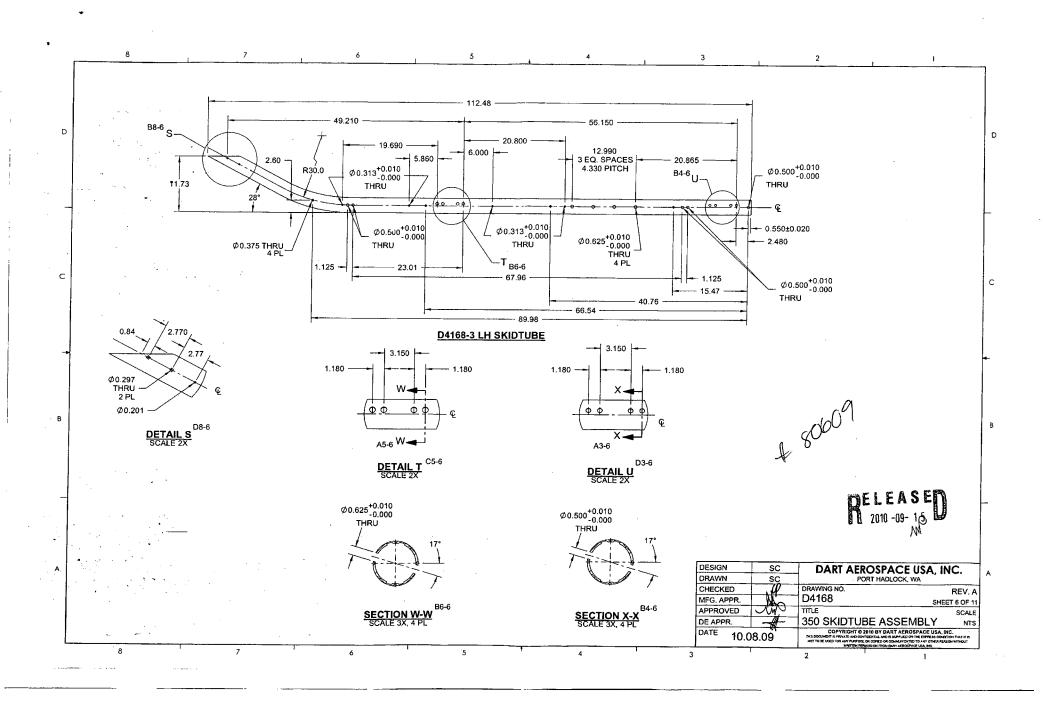
Dart Ae	rospace	Lta									
W/O:			WO	RK ORDER CHANG	GES						
DATE	STEP	PR	ROCEDURE CHANGE			Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
									·.		
·											
D N.											
Part No	Part No: PAR #:		Fault Categ								
			Disposition):	QA: N/C	Closed: _		Date: _			
NCR:			WORK ORDE	R NON-CONFORM	ANCE (NO	CR)					
DATE	OTED	Description of NC		Corrective Action Section		Ver	ification	Approval	Approval		
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sig: Da	1& Sa	ection C	Chief Eng	QC Inspector		
•											



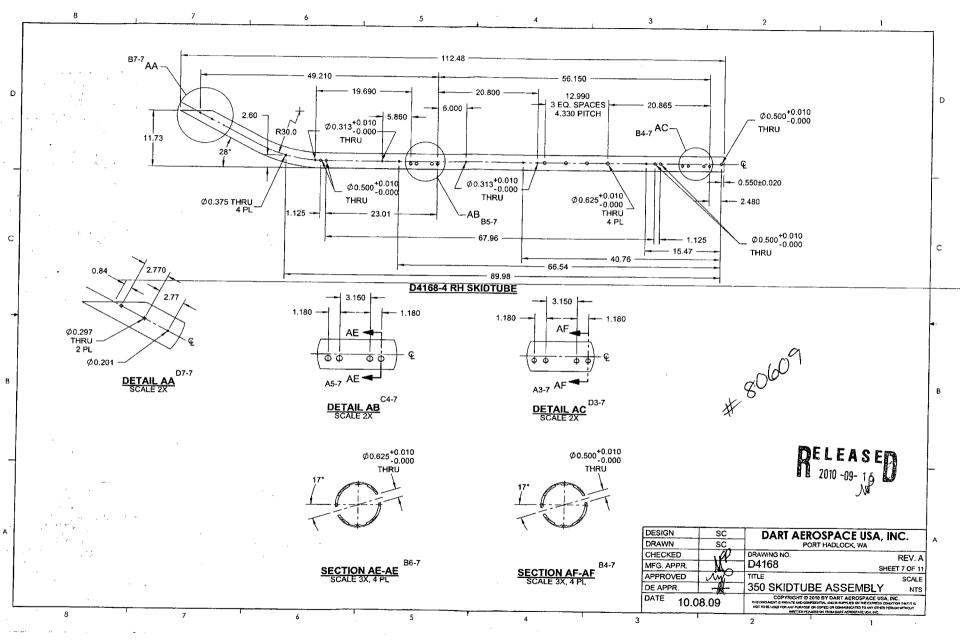
W/O:	V/O:		WORK ORDER CHANGES									
DATE	STEP	PRO	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector					
						<u></u>						
Dord No.												
		PAR #:										
Resolution:		esolution:						Date:				
NCR:		\\	WORK ORDI	ER NON-CONFORMA	NCE (NCR	(1)						
DATE	STEP	Description of NC	Corrective Action Section		Verific	ation	Approval	Approval				
DAIL	J.L.	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section	on C	Chief Eng	QC Inspector			
							·					
								:				
								:				
							-					
•												

NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

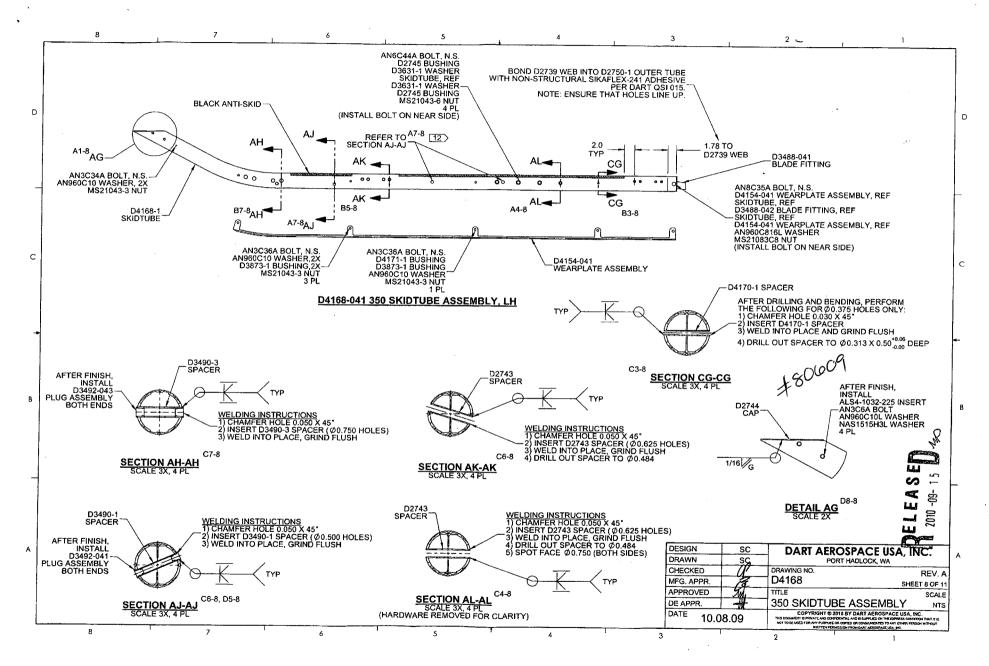


	•							· · ·			
W/O:			WORK ORDER CHANGES								
DATE	STEP	PRO	OCEDURE CH	ANGE	Date Q	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector			
				•							
					·						
	!										
								i,			
Part No	•	PAR #:	Fault Cat	egory:	_ NCR: Yes	NCR: Yes No DQA: Date:					
Resolution:			Disposition: QA			losed:		Date:	g ⁿ c		
NCR:		\	WORK ORE	DER NON-CONFORM	ANCE (NC	₹)					
DATE	STEP	Description of NC	Description of NC Corrective Action S				ation	Approval	Approval		
DAIL	SIEF	Section A	Initial Chief Eng	Action Description Chief Eng	Sign of Date		on C	Chief Eng	QC Inspector		
i	1	1	1 1	•	1	ı			i i		

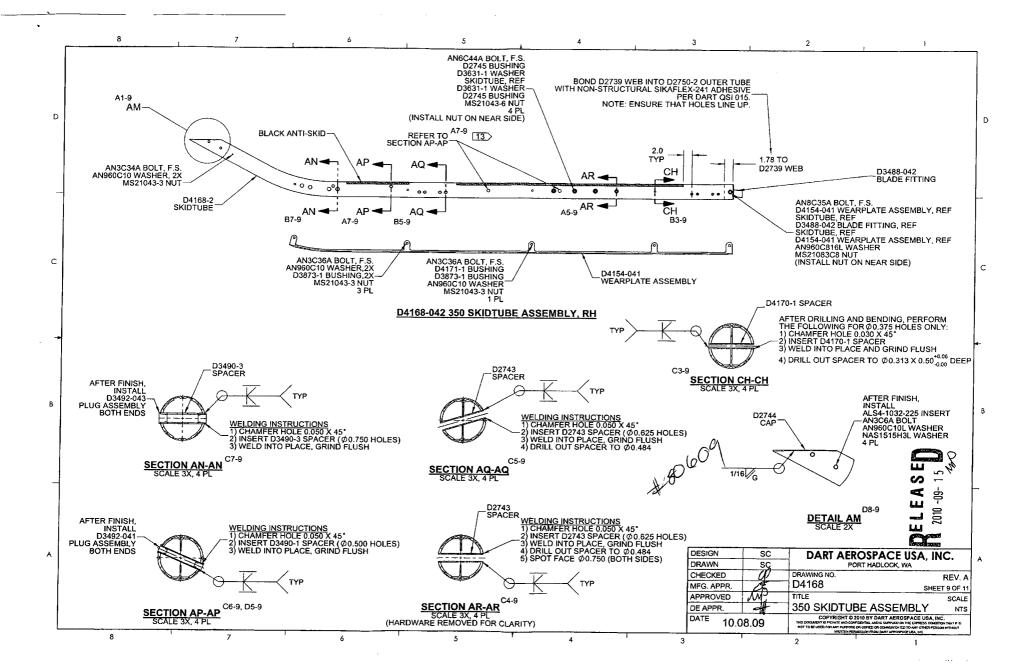


Part No:PAR #:Fault Category:NCR: Yes No DQA:Date: Resolution:Disposition:QA: N/C Closed:Date: NCR: WORK ORDER NON-CONFORMANCE (NCR) Date: Corrective Action Section B	W/O:		WORK ORDER CHANGES											
Resolution:	DATE	STEP	PRO	Ву	Date	Qty	Chief Eng /	Approval QC Inspector						
Resolution:														
Resolution:														
Resolution:					,	· · · · · · · · · · · · · · · · · · ·								
Resolution:									ì					
Resolution:										,				
NCR: WORK ORDER NON-CONFORMANCE (NCR) DATE STEP Description of NC Section A portion Section B Section C	Part No	:	PAR #:	Fault Cate	gory:	NCR: Yes	NCR: Yes No DQA: Date:							
DATE STEP Description of NC Section A Section B Section B Section C Section A Section C Section	Resolution:									<u>.</u>				
DATE STEP Description of NC Initial Action Description Sign & Verification Approval	NCR:													
Section A Initial Action Description Section C Chief Eng QC inspec	DATE	STEP	Description of NC		0 1			Approval						
			Section A					ion C	Chief Eng	QC Inspector				
									<u> </u>					
										,				
			······································											

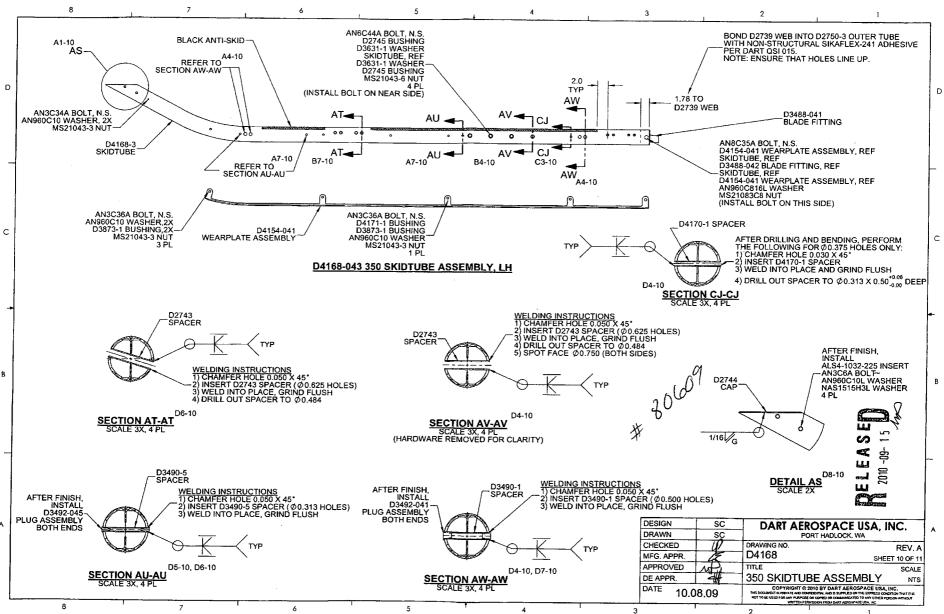
	,													



											
		WORK ORDER CHANGES									
STEP	PRO	OCEDURE CHA	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC inspector			
:	PAR #:	Fault Cated	gory:	NCR: Yes	_ Date: _						
			1:	QA: N/C Cl	osed:		Date: _				
	,	WORK ORDI	ER NON-CONFORMAL	NCE (NCR)						
STED	Description of NC		Corrective Action Section B			ation	Approval	Approval			
SILF	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section	on C	Chief Eng	QC Inspector			
						:					
	——————————————————————————————————————		7.11.11.11.11.11.11.11.11.11.11.11.11.11	,							
		PAR #:PAR #:	PAR #: Fault Cates Resolution: Disposition WORK ORDI STEP Description of NC Section A Initial	STEP PROCEDURE CHANGE PAR #: Fault Category: Resolution: Disposition: WORK ORDER NON-CONFORMAL STEP Description of NC Section A Corrective Action Section Initial Action Description	STEP PROCEDURE CHANGE By PAR #: Fault Category: NCR: Yes Resolution: Disposition: QA: N/C Clo WORK ORDER NON-CONFORMANCE (NCR STEP Description of NC	STEP PROCEDURE CHANGE By Date :PAR #:Fault Category:NCR: Yes No DQA Resolution:Disposition:QA: N/C Closed: WORK ORDER NON-CONFORMANCE (NCR) STEP Description of NC	STEP PROCEDURE CHANGE By Date Qty	STEP PROCEDURE CHANGE By Date Qty Chief Eng / Prod Mgr			

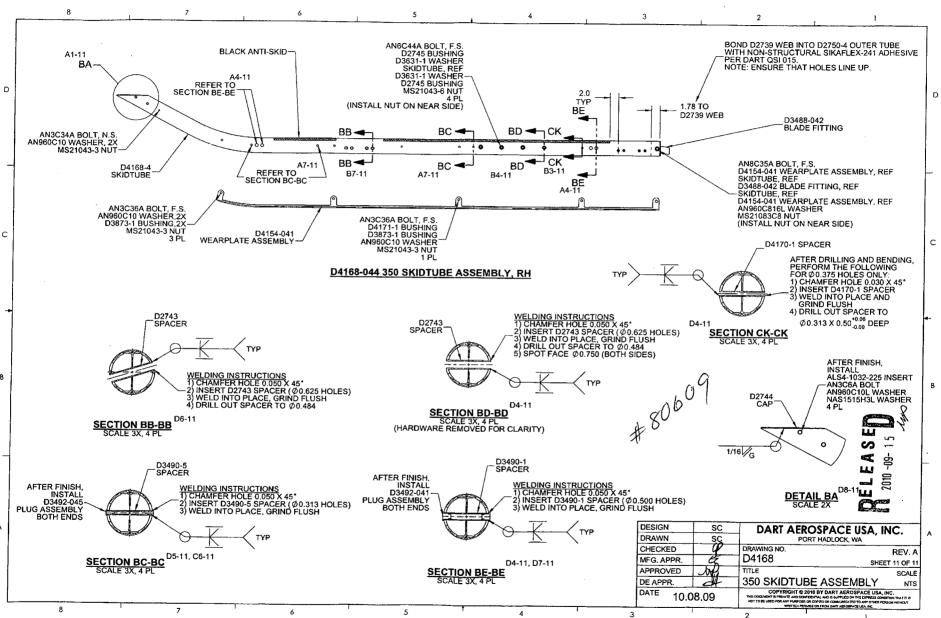


								*					
W/O:		· · · · · · · · · · · · · · · · · · ·	WORK ORDER CHANGES										
DATE	STEP	PRO	OCEDURE CHA	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector				
				• -									
- · · · · · · · · · · · · · · · · · · ·													
		PAR #:	Fault Cate	jory:	NCR: Yes	No DQ	A:	_ Date: _					
	Re	esolution:	Disposition	n:	QA: N/C CI	osed:		Date:					
NCR:			WORK ORDER NON-CONFORMANCE (NCR)										
DATE	STEP	Description of NC	Corrective Action Section		Verific	ation	Approval	Approval					
DALL	JILP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Secti	on C	Chief Eng	QC Inspector				
						!							
						:							
		·											
•													



•										
//O:		WORK ORDER CHANGES								
STEP	PR	OCEDURE CHA	CEDURE CHANGE			Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
							1			
		Fault Cate	Fault Category: NCI			_ NCR: Yes No DQA: Dat				
			1:	_ QA: N/C Clo	osed:		Date: _			
NCR:		WORK ORDI	ER NON-CONFORMA	NCE (NCR)					
STED	Description of NC			Verific	ation	Approval	Approval			
SILF	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section	on C	Chief Eng	QC Inspector		
								i		
		Resolution: Description of NC	PAR #: Fault Cated Resolution: Disposition WORK ORDE STEP Description of NC Section A Initial	STEP PROCEDURE CHANGE PROCEDURE CHANGE Fault Category: Resolution: Disposition: WORK ORDER NON-CONFORMA STEP Description of NC Section A Corrective Action Section Initial Action Description	STEP PROCEDURE CHANGE By PROCEDURE CHANGE By Fault Category: NCR: Yes Resolution: Disposition: QA: N/C Cle WORK ORDER NON-CONFORMANCE (NCR STEP Description of NC Corrective Action Section B Initial Action Description Sign &	STEP PROCEDURE CHANGE By Date PAR #: Fault Category: NCR: Yes No DQ/ Resolution: Disposition: QA: N/C Closed: WORK ORDER NON-CONFORMANCE (NCR) STEP Description of NC	STEP PROCEDURE CHANGE By Date Qty	STEP PROCEDURE CHANGE By Date Qty Chief Eng / Prod Mgr		

H\\frcians\Quality Assurance\approved QA\NCRWO RevE



Dart Ae	erospace	Ltd
---------	----------	-----

	Johan										
W/O:		WORK ORDER CHANGES									
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector				
							\ .				
					- Tage	-					
				•		•					
				·							
Part No		PAR #: Fault Category: NO	CR: Yes	No DQ	\: ***	Date:					

Resolution:		Disposition:			QA	QA: N/C Closed:				
NCR:			WC	RK ORI	DER NON-CONFO	ORMANCI	E (NCR)			
DATE	STEP	Description of NC Section A	j. Fe	Initial Chief Eng	Corrective Action Action Descrip	Section B ption	Sign &	Verification Section C	Approval Chief Eng	Approval QC Inspector
						<u>,</u>		35 ⁵ 2		
								•		9
*, *										

NOTE: Date & initial all entries